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Result
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ŏ.
 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                         188
111.5
74
72
72
71
71
70
70
68
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 66.5
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1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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BLOSUM62
Gapop 10.0 ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SQRQFQECQQHCHQQEQRPE....QQCVRECREKYQENPWRGER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1, 2001, 15:52:45; Search time 170.72 Seconds (without alignments)
16:705 Million cell updates/sec
Match 100%
first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB
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                             T332221
T232221
T08588
S26636
S26636
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S360637
PS0425
PS04626
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PS0
                                                                                                                                                                                                                                                                                                                    $08059
FWCNAB
$06398
$22477
T13857
T18592
T18593
A37931
$65447
RGBYS5
A45973
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Compugen
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         protein kinase YAK
napin precursor (g
hypothetical prote
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regulatory protein
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napin AH1 precurso
napin BA3 precurso
merozoite antigen
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napin - Swedish tu
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typ
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protein-tyrosine-p	JC5220	N	521	25.9	63.5	4.5
napin (clones	S52025	2	180	25.9	63.5	44
napin (clone BngNA	S10018	N	180	25.9	63.5	43
2S storage protei	S25130	N	178	25.9	63.5	42
napin precursor	A25997	N	178	25.9	63.5	41
napin napB - rape	S15382	N	178	25.9	63.5	40
napin B - rape	S07828 ·	Ŋ	178	25.9	63.5	39
napin 2 precursor	NWRP2	_	178	25.9	63.5	38
napin BG9 precurso	PS0426	2	155	25.9	63.5	37
allergen Sin a	S65479	Ŋ	145	25.9	63.5	36
allergen Sin	S65480	2	145	25.9	63.5	ω 5
allergen Sin	S65482	N	145	25.9	63.5	34
allergen Sin a	S65481	2	145	25.9	63.5	33
Sin a I allerger	PC1246	2	145	25.9	63.5	32
Sin a I allergen	PC1247	N	145	25.9	63.5	31
napin nIa - rape	S20350	2	110	25.9	63.5	30

## ALIGNMENTS

A;Accession: A30838
A;Molecule type: mRNA
A;Residues: 1-588 <cli>Celly
A;Cross-references: GB:M16891; NID:g167374; PIDN:AAA33071.1; PID
A;Experimental source: var. Coker 201
A;Experimental source: var. Coker 201
A;Experimental source: var. Coker 201
A;Chlan, C.A.; Borroto, K.; Kamalay, J.A.; Dure III, L.
Plant Mol. Biol. 9, 533-546, 1987
A;Title: Developmental biochemistry of cottonseed embryogenesis A;Reference number: S06398
A;Reference number: S06398
A;Status: not compared with conceptual translation
A:Status: not compared with conceptual translation A;Molecule type: DNA
A;Residues: 1-81 <CH2>
C;Comment: This is a seed storage protein. C;Accession: S08059
R;Chlan, C.A.; Borroto, K.; Kamalay, J.A.; Dure III, L.
Plant Mol. Biol. 9, 533-546, 1987
A;Title: Developmental biochemistry of cottonseed embryogenesis and germination. XIX.
A;Reference number: S06398
A;Accession: S08059 RESULT FWCNAB A; Molecule type: DNA A; Residues: 1-509 < CHL> C; Superfamily: glycinin alpha-globulin type B precursor (tandem 1) - upland cotton (fragment) N;Alternate names: seed storage protein C;Species: Gossypium hirsutum (upland cotton) C;Date: 31-Mar-1990 #sequence\_revision 31-Mar-1990 #text\_change 30-Sep-1993 В Qy A; Status: not compared with Query Match
Best Local Similarity Matches 39 42; Conservative 100.0%; conceptual translation 0 Score 245; DB 2; Pred. No. 1.1e-19; Mismatches 0; Lenyth 509; Indels PID: g167375 and and 16-Jul-1999 0 germination. XIX germination XVIII 0;

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A:Status: not compared with conceptual translation
A:Molecule type: DNA
A:Molecule type: DNA
A:Residues: 1-605 <CHL>
C:Superfamily: glycinin
F:1-24/Domain: signal sequence #status predicted <SIG>
F:25-605/Product: alpha-globulin type A #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C:Superfamily: glycinin
C:Keywords: glycoprotein; seed; storage protein
F:1-25/Domain: signal sequence #status predicted <SIG>
F:26-588/Product: alpha-globulin storage proprotein #status predicted <MAT>
F:417/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                              R:MCHenry, L.; Fritz, P.J.
Plant Mol. Biol. 18, 1173-1176, 1992
A;Title: Comparison of the structure and A;Reference number: $22477; MUID:92288309
A;Accession: $22477
                                                                                                                                                                                                                                                                                                                                  C;Species: Theobroma cacao (cacao)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change
C;Accession: $22477; $22478; $18105; $22050
                                                                                                                         A; Introns: 211/1; 269/3; 296/3; 391/3; 502/1
                                                                                                                                         C; Genetics:
                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-452 <MC2>
                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-566 < MCH>
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                                                                                        Superfamily: glycinin Keywords: seed; storage protein
                                                            25-566/Product:
 Best Local Similarity
                Query Match
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Best Local
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                                                         l-24/Domain: signal sequence #status predicted
25-566/Product: vicilin #status predicted <MAT:
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Score
Pred.
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Pred. No. 2.2e-13;
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Pred. No. 4.2e-18;
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111.
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.5; DB
5e-05;
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              2;
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              Length 566;
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                                                           RESULT
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A; Introns: 18/3
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                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-425 <WIL>
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T18592
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                                                                                                                                                                                                                                                              C; Superfamily: gliadin
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A; Residues: 1-3828 <MAZ>
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Best Local
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hypothetical protein AC3.3 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Feb-2000
hypothetical protein AC3.4 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Decies: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999 C;Accession: T18593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary; translated from GB/EMBL/DDBJA;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     submitted to the EMBL Data A; Reference number: Z18995 A; Accession: T18592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Introns: 337/3; 529/1; 721/1; 791/1; 3668/2; 3713/1; 3771/3 C;Superfamily: Drosophila trithorax protein C;Keywords: DNA binding; transcription regulation; zinc finger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             trithorax protein - fruit fly
c;Species: Drosophila virilis
C;Date: 20-Sep-1999 #sequence_
C;Accession: T13857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Cross-references: EMBL: Z71177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: EMBL:Z50038; NID:g899253; PID:g899254; PIDN:CAA90349. C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  submitted to the EMBL Data Library, A; Reference number: Z17801
                                                                                                                                                                                                        6 QECQQHCHQ----QEQRPEKKQQCVREC
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                                                                                                                                                                  QQCQQQCVQTQPIQQCQPQCQQQCVQQC
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38.2%;
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Pred. No.
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                                                                                                                                                                                                                                                                                      Length 425;
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A;Experimental source: seed R;Menendez-Arias, L.; Moneo, I.; Dominguez, J.; Rodr Eur. J. Biochem. 177, 159-166, 1988
A;Title: Primary structure of the major allergen of A;Reference number: S01791; MUID:89030681
A;Accession: S01792
                                                                                                                                                                                                                                    R:Gonzalez de la Pena, M.A.; Monsalve, R.I.; Batanero, Eur. J. Biochem. 237, 827-832, 1996
A;Title: Expression in Escherichia coli of Sin a 1, the A;Reference number: S65447; MUID:96235251
A;Accession: S65447
-/wesidues: 40-127 <MENS
C;Superfamily: wheat -'
                        A; Molecule type:
A; Residues: 40-12
C; Superfamily: wh
                                                                                                                                                                                                A; Molecule type: protein A; Residues: 1-127 <GON>
                                                                                                                                                                                                                                                                                                                                N;Alternate names: allergen Sin a I large chain C;Species: Sinapls alba (white mustard) C;Decies: Se-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 17-Mar-1999 C;Accession: S65447; S01792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: protein \
A; Residues: 1-124 <SVE>
C; Superfamily: wheat alpha-amylase inhibitor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Reference number: A37931; MUID:91282906 A;Accession: A37931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Svendsen, I.; Nicolova, D.; Goshev, I.; Genov, N. Carlsberg Res. Commun. 54, 231-239, 1989
A;Title: Isolation and characterization of a trypsin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C; Accession: A37931
R; Syendsen, I.; Nic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      napin - Swedish turnip (fragments)
C:Species: Brassica napus var. rapifera (Swedish turnip, rutabaga)
C:Date: 31-May-1991 #sequence_revision 31-May-1991 #text_change 12-Apr-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Experimental source: clone C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-600 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             submitted to the EMBL Data A; Reference number: Z18995 A; Accession: T18593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;McMurray, A. submitted to t
                                                                                                                                                                                                                                                                                                                                                                                                           allergen Sin a I - white mustard
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Cross-references: EMBL: 271177;
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Best Local Similarity 32...
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QECQQHCHQ----QEQRPEKKQQCVREC 29
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                        alpha-amylase
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                                                                                                                                                          I.; Dominguez, J.; Rodriguez,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AC3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 71; DB 2;
Pred. No. 0.38;
7; Mismatches
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Pred. No.
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                          inhibitor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -EQRPEKKQQCVRECREKYQENP 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2;
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hypothetical protein 2C101.1 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Aug-2000 C;Accession: T23229; T27491 R;Percy, C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT
S35221
A:Map position: 2
A:Introns: 68/2; 123/2; 214/3; 275/3; 326/1; 362/3; 423/1; 466/1; 615/1; A:Introns: 68/2; 123/2; 214/3; 275/3; 326/1; 362/3; 423/1; 466/1; 615/1; C:Superfamily: LDL receptor ligand-binding repeat homology <LDL1>
F:140-178/Domain: LDL receptor ligand-binding repeat homology <LDL1>
                                                                                                                     A;Cross-references: EMBL:Z93395; PIDN:CAB07705.1; GSPDB:GN00020; CESP:ZC101.1 A;Experimental source: clone ZC101 C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                         submitted to the EMBL Data Library, November 1996 A; Reference number: Z19711 A; Accession: T23229
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C;Superfamily: glycinin
C;Keywords: glycoprotein
F;174-190/Product: globulin
                                                                                                 A; Gene: CESP: ZC101.1
                                                                                                                                                                                                                                               A; Reference number: A; Accession: T27491
                                                                                                                                                                                                                                                                     submitted to the EMBL Data A; Reference number: Z20375
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                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-905 <WI2>
                                                                                                                                                                                                                                                                                                               R; Percy, C.
                                                                                                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-905 <WIL>
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C;Genetics:
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C; Species: Hordeum vulgare (barl
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                                                                                                                                                                                                                                                                                                                                       A; Experimental source: clone
                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:Z83112; PIDN:CAB05541.1; GSPDB:GN00020; CESP:ZC101.1
                                                                                                                                                                                                                                                                                                                                                                                                                     A; Status: preliminary; translated from
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-637 <HEC>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Title: Barley embryo globulin 1 gene, Beg1: A; Reference number: S35221; MUID:93287988
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 RKEFQQAQHLRACQQWLHKQAMQSGSGPSPQGPQQRPPLLQQC---CNELHQEEP
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32.7%;
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Pred. No.
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Pred. No. 0.39;
                                                                                                                                                                                                                                                                                             March 1997
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hypothetical protein L23H3.30 - Arabidopsis thaliana C:Species: Arabidopsis thaliana (mouse-ear cress) C:Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 22-Oct-1999 C:Accession: T08588 R;Bevan, M.; Pohl, T.; Weizenegger, T.; Bancroft, I.; Mewes, H.W.; Mayer, K.F.X. submitted to the Protein Sequence Database, May 1999 A;Reference number: Z16098 A;Accession: T08588 A;Accession: T08588 A;Accession: T08588 A;Molecule type: DNA A;Residues: 1-930 <BEV> A;Cross-references: EMBL:AL050398; GSPDB:GN00062; ATSP:L23H3.30 A;Experimental source: cultivar Columbia; BAC clone L23H3 C:Genetics: A;Gene ATSP:L23H3.30 A;Map position: 4 A;Introns: 11/2; 51/1; 87/3; 249/3; 278/2; 304/3; 330/1; 346/3; 449/3; 523/3; 60
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F:329-364/Domain:
F:431-465/Domain:
F:513-550/Domain:
F:579-614/Domain:
F:767-801/Domain:
                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: protein
A; Residues: 1-106 < MON>
C; Superfamily: wheat alpha-amylase inhibitor
C; Keywords: pyroglutamic acid; seed; storage protein
C; Keywords: pyroglutamic acid; seed; storage pyroglutamic acid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               napin nIb - rape
C;Species: Brassica napus (rape)
C;Species: Brassica napus (rape)
C;Date: 12-Feb-1993 #sequence_revision 12-Feb-1993 #text_change 04-Oct-1996
C;Accession: $26636
R;Monsalve, R.I.; Lopez-Otin, C.; Villalba, M.; Rodriguez, R.
FEBS Lett. 295, 207-210, 1991
R;Billett. 295, 207-210, 1991
A;Tille: A new distinct group of 2 S albumins from rapeseed. Amino acid sequence A;Reference number: $20350; MUID:92111741
A;Accession: $26636
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S26636
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QREFQQEQHLRACQQWIRQQLAGSPFQSGPQQGPWLREQC--
                                                                     QRQFQE-----CQQHCHQQ-----
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14; Conserv
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Pred. No. 2.6;
11; Mismatches
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Pred. No. 4
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Pred. No. 1;
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      -CNELYQED
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                                                                                                                                   Indels
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A:Experimental source: seed C;Superfamily: wheat alpha-amylase inhibitor C;Keywords: storage protein F;1-28/Domain: signal sequence and propeptide (fragment) #status F;29-63/Product: napin small chain #status predicted <NIC> F;83-168/Product: napin large chain #status predicted <NIC>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C:Species: Raphanus sativus (radish)
C:Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 16-Jul-1999
C:Accession: PS0425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A.Cross-references: GB:M63842; GB:M36629; NID:g169695; PIDN:AAA63471.1; PID:g169696
A:Experimental source: seed
C:Superfamily: wheat alpha-amylase inhibitor
F:I-6/Domain: signal sequence and propeptide (fragment) #status predicted <PRO>
F:7-41/Product: napin small chain #status predicted <NSC>
F:61-146/Product: napin large chain #status predicted <NLC>
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                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
A; Residues: 1-174 < RAY>
                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Title: Characterization and evolution of A; Reference number: PS,0425; MUID: 91216448 A; Accession: PS,0425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R:Raynal, M.; Depigny, D.; Grellet, F.; Delseny, Gene 99, 77-86, 1991
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C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 16-Jul-1999
C;Accession: PS0427
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A; Residues: 1-152 < RAY>
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nes 19; Conserv
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Pred. No. 1.6;
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Pred. No. 1.4;
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                                                                                                                  -----EQRPEKKQQCVR 27
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Job time: 570 sec

